PRINCIPLES UNDERLYING THE MAKING OF COURSES OF STUDY FOR SECONDARY SCHOOLS STATED FROM THE POINT OF VIEW OF THE UNIVERSITY[1]

In general, there are two, and but two points of view from which courses of study for secondary schools can be profitably discussed. The first of these is the theoretical, the second the practical point of view. In other words, both theoretical elements and practical elements enter into the problem. Furthermore, the theoretical elements are the same no matter from what point of view they are considered, whether the high school, the private school, the normal college, or the university. Accordingly, the "points of view" mentioned on the programme, are of importance only when the subject is taken up as a practical problem. Still it will be well at least to glance at the theoretical aspect of the subject.

Approaching secondary courses of study on the theoretical side, the first question that confronts us is this: What is a secondary school in contradistinction to an elementary school, on the one hand, and a high school on the other? To put it more abstractly, what are the characteristics of elementary, secondary, and higher education? Are there fundamental differences? and, if so, what are they?

The tripartite division of education is of high antiquity. It was practically recognized by the Greek and Roman teachers, and was formally elaborated by Plato and Aristotle in their pedagogical writings. It was not wholly lost sight of in the Middle Ages, and at the beginning of the modern era of popular instruction it was articulately worked out by Luther and Comenius. It is now universally recognized in literature and in speech, and, what is more to the purpose, underlies the existing organization of schools in all progressive countries. These facts suggest the presumption that the scheme is not due to either accident or convenience, but that it rests upon some pedagogical basis. And such is the truth.

In dealing with education, the term elementary is used in two senses. It is applied to the rudiments of any study, no matter how

[1] Paper by B. A. Hinsdale, of the University of Michigan, read at the joint session of the Michigan Schoolmasters' Club and the Classical Conference, April 1, 1898. See p. 460.

difficult the study may be or in what division of teaching it may fall. In this sense it may or it may not be applied to the elementary school. We do not relegate Archbishop Whately's well-known text-books to the primary teacher because they are called "Elements of Logic" and "Elements of Rhetoric." We rather apply the term elementary to a school having as its characteristic function the teaching of the elements or rudiments of education, scholastically considered. This may be called, if we please, a technical use of the word.

The function of an elementary school is twofold. It is, first, to teach certain school arts, as reading, writing, composition, arithmetical calculation, and drawing,—what may be called the instrumental studies. Its other function is to teach the rudiments of all the great divisions of human cultivation, viz., the facts of nature, the facts of human society, and the facts of the conscious mind, together with the expression of these facts in oral and written language. The large mass of facts that the pupil accumulates in this period of his instruction has a present guidance value, and will also furnish apperceptive centers for future acquisition. The memory, therefore, will be constantly exercised; but not the memory only among the intellectual faculties, because the attempt to understand things in themselves, and in their immediate relations, which is as far as the teaching of relations can go in a school of this grade, will develop analysis, comparison, imagination, and power of inference. Moreover, all this work, from first to last, has a large disciplinary and culture value. In respect to morals and character, it suffices to say, that they are, directly and indirectly, provided for in this curriculum, except in so far as they fall under the head of governmental discipline. Accordingly, the note of the elementary school is preparation, looking forward as it does either to self-culture or to a school of higher grade.

The secondary school also pays some attention to teaching tools or instruments, as new notations, alphabets, and the like, including the rudiments of new languages. The main function of the school, however, is to give further instruction in the great subjects of knowledge that have been entered upon in the elementary school — literature, history, mathematics, language, natural science, philosophy under some name or other, and social phenomena. Everything is done on a larger scale than before. All the great divisions of human cultivation are studied and taught with greater depth and greater breadth. There is a large addition to the pupil's store of facts and ideas; he knows more; and yet the memory is relatively less prominent than in the earlier

school. Less stress is laid upon empirical knowledge, and more upon philosophical knowledge. The peculiar element of science, that is the relations existing among groups of facts, what Dr. Harris in his new book calls "the relativity doctrine," is prominent. The note of the school is discipline.

The university, or school of highest learning, may teach the use of tools, and the elements of certain subjects, but such work is a subordinate feature. The student is now fitted for higher work, and is expected to do it. Discipline will be gained in this school, but discipline does not give the school its character. Measurably, at least, the student is already disciplined. In other words, the student's tutelage, or preparation is behind him, the kingdom of knowledge before him. A great and effectual door has been opened, and he enters into the broad field to which it leads. He becomes an investigator or scholar, and responds to the truth uttered by Mark Pattison in his *Life of Casaubon*, "the only motive which can support the daily energy called for in the solitary student's life, is the desire to know." The note of the University is acquisition, knowledge.

Such is the significance of the tripartite division of education when it is determined by the character of studies as correlated to the human mind. Such are the functions employed by the three grades of schools in carrying on the complete work of education. If this be not so, then the whole scheme is without a philosophical basis, and rests only upon convention and convenience. Time can be found for only one or two of the many observations that the outline suggests.

It must be remembered that this outline is a purely theoretical view of the subject. It may well be, therefore, that it will fail to apply throughout to any organized system of education now in existence. There is no such system that pure theorists have made, even in the lands where doctrinaires are most numerous; all existing systems have been modified more or less by historical causes. It is very certain, for example, that this description will not apply to the English educational system, or to that of the United States. It conforms more nearly, however, to the Continental systems, and perhaps most nearly to that of Germany. Perhaps no system that conforms fully to the pattern would work in any country. But even if this be granted, the fact would not prove that the outline is without value. It would still remain an ideal or a norm that would, to a certain extent, govern practice.

What has been said so far is wholly independent of points of view;

it is of equal value or truth to the high school, the private school, the normal school, and the college teacher. But the moment we take up a system of instruction as existing, and especially with a reformatory purpose, then points of view become valid. What, then, has the university to say of secondary courses of instruction considered as a practical question?

1. Educational conditions have changed very greatly since the year 1200, which is about the time that the first universities were founded. Then there was in Europe no fully organized system of education such as exists in every progressive country today. The tripartite scheme can be traced only in outline. In fact, the universities of Christendom are the oldest existing part of its educational system. Education in the modern world, at least, has grown from the top downwards. Still it would be a great mistake to suppose that the first university instruction was organized without reference to existing conditions. In the fifth century the cathedral and claustral schools appeared in Gaul, and they gradually overspread western Europe, expanding their teaching as they went. In time they were reënforced by the municipal schools, which gave much the same kind of instruction. These schools appear to have covered the whole field of education for a time; at least, there were no schools above them until the universities appeared. The teaching that they furnished flowered out in the trivium — grammar, dialectics, and rhetoric; and the quadrivium — arithmetic, music, geometry, and astronomy. As the old schools emphasized increasingly the seven liberal arts, elementary instruction fell more and more into the hands of parish schools and private teachers.

The earliest accounts of the instruction given in the universities negative the assumption that these institutions fixed their standards regardless of the intellectual condition of the times. "The mediæval idea of knowledge, or rather of its ultimate foundation," says Mr. Rashdall, "rarely went beyond knowing what somebody had said about something." He says further that "it is hardly possible to exaggerate the importance of the innovation in the history of education which is suggested by the very idea of a curriculum in the sphere of liberal education," which he attributes, in its practical realization, to Robert De Courçon, in 1215. Instruction in the Latin language was limited to grammar, which was studied in one or both of the two "Priscians." Logic was the main subject of teaching. The Old and New Dialectic of Aristotle, that is the whole Organon together with the *Isagogè* of Porphyra, were read *ordinarie;* rhetoric and philosophy were reserved

for festivals. In rhetoric the books were the *Barbarismus* of Donatus and the *Topics* of Boethius. Philosophy included the Nicomachean Ethics, and the subjects of the quadrivium, for which no books were prescribed. The metaphysics and natural philosophy of Aristotle were strictly forbidden. The ancient poets, historians, and orators, that is, what we call the classics, were wholly omitted. Such was the curriculum at Paris in 1215.[1] Von Raumer quotes the list of lectures in the University of Prague in 1366, and the list shows that in one respect a great change has taken place. It contains sixteen books that "passed for" Aristotle, viz., Metaphysics, Physics, On the heavens, Generation, Sense and Sensation, Memory and Recollection, Sleep and Waking, Length and Shortness of Life, Vegetables, Ethics and Physics, Politics and Physics, Rhetoric and Physics, Economics, Prior (ethics?), Posterior (ethics?), and Topics. Besides these books, the list contains Boethius *de Consolatione*, The Old Logic, Treatise of Peter Hispanus, Material Sphere, Algorism, Theory of the Planets, six books of Euclid, Almagest, Almanach, Priscian (Major), de Græcismo, Poctria Nova, Labyrinth, Boethius on The Discipline of Schools, and Doctrinale, second part.[2]

Now it is evident that these curricula were not fixed arbitrarily. The men of the universities did not raise aloft their standards in the air, expecting to see the lower schools lifted up to them by some occult cause as, in the vulgar story, the iron coffin of Mohammed is said to have ascended to the top of the Caäba. On the contrary, they consulted existing educational conditions; and that they did not raise their standards too high is shown by the great number of students that flocked to them. The fact appears to be that some of the first universities, as Bologna and Paris, grew out of older but inferior schools. Still more, much of the work that the universities now undertake to do had before been done, no doubt less perfectly, by the old schools. Indeed, the whole trivium and quadrivium now passed to the higher schools. Nor is this all; the writers who deal with the subject point out the very schools in which university students obtained their preparation. This preparation embraced, let it be remarked, not only ability to grapple with the subjects of the lectures, but also ability to read, write, and speak Latin, which was the language both of the lecture room and of the common room. There were grammar schools in the university towns, but the pupils who attended them, Mr. Rashdall thinks, came from the immediate neighborhood, and the majority of

[1] RASHDALL, *Universities of Europe in the Middle Ages*, Vol. I, pp. 433–434.

[2] BARNARD, *The American Journal of Education*, Vol. VI, p. 54.

the students at the universities must have obtained their preparation nearer home, either in schools of some sort, or from private tutors.[3] It is, therefore, clear that from the first the universities formed part of a system of education, although this system was rudimentary and ill organized, as compared with our own.

2. The establishment of the university was really the first step towards organizing the educational system that overspreads Christendom today. The old types of schools soon began to disappear, giving place to new types. The revival of learning hastened the process. The men of the old schools, bred up in the school Latin, set their faces, like flint, against the Latin of Cicero and Virgil. But resistance was vain. Classic Greek made its way more easly than classic Latin, because the ground was not previously encumbered with a barbaric school Greek. Naturally the new studies brought new teachers, and the new studies and new teachers together brought new schools, different in ideals, in moral environment, and in spirit from the old schools. The cathedral and claustral schools were too scholastic and ecclesiastical to adapt themselves to the new time, and so passed away. We should not be surprised, therefore, to see such a school come upon the scene as the Gymnasium of Strassburg, presided over by John Sturm, which, no doubt, had a wider influence over educational history than any other secondary school that ever existed. Nor can there be any doubt that the universities would have followed the cathedral and claustral schools if they had not adapted themselves to the new conditions. With more or less reluctance, they did finally open their doors to the Greek and Latin classics. In England the ecclesiastical schools were already giving way to the new grammar schools when the Protestant Reformation drew on.

But we must not miss the main point of the argument. This is, that henceforth the universities formed an integral part of an organized educational system, which continued to expand and strengthen with the development of modern life. Still less than before could they legislate merely to suit themselves. They were now members of an educational body or organism; and they could no more discard or disregard the other members than, in the apostle's allegory, "the eye can say to the hand I have no need of thee, nor again the head to the foot, I have no need of you." If there is any truth or pertinency in the biological metaphors that we apply to human society, there is truth and pertinancy here; and the more thoroughly one is committed to

[3] *Universities*, etc., Vol. II, p. 600.

this organic view of society, the more ready will he be to see that the universities had, in a sense, parted with a portion of their freedom.

3. As already remarked, the modern educational system has grown downward. The order of development has been, universities, secondary schools, elementary schools. When the system had been completed, the university was still less a law unto itself than it had been before. In fact, the enormous growth and extension of education in recent times is at once a partial effect of the full development of the educational organism, and a partial cause of the increasing difficulty of making changes in the system. Education has passed from compara tive simplicity to great complexity.

4. What has been said relative to organization applies to any modern state. But there is much more in the argument than has yet appeared. For example, the reasoning is more cogent in the case of France or Germany, where education from top to bottom is a state function, than in England, where educational institutions have *grown up* and do not conform, save in the rudest manner, to any general plan. Again, the reasoning applies more fully to one of our own western states than to New England; in the one instance, there is a fully organized state system of public instruction, while in the other, only a truncated system is found, and higher education is furnished by what in France and Italy would be called "free" colleges and universities. It is obvious that in one of the western states the similitude of a natural organism holds more fully than in the old states of the East. Even institutions outside of the state system, as the church colleges, are drawn into a close connection with it through competition and sympathy. The people of Michigan, for example, have long boasted the possession of a system of public instruction based on the so-called Prussian ideas, viz., elementary, secondary, and higher instruction, furnished by appropriate schools, maintained and supervised by the state. The same is true of other western states. Evidently the connection of parts is closer than it is even in France or in Germany, because in these countries candidates for the universities do not commonly enter the public elementary schools at all.

Manifestly the facts relative to such a state as Michigan must be considered in the fabrication of courses of study for both elementary schools and high schools. To deny it is to deny the validity of the very ideas upon which the state system has built up; for the ideal is not three grades of schools and of instruction supported and supervised by the state, but three grades of schools and of instruction so related

to one another that they form, to borrow Professor Huxley's famous similitude, a ladder reaching from the gutter to the university. It is not an exaggeration to say, that the man who denies or questions this conclusion shows a degree of either ignorance or fatuity that disbars him from this discussion in the court of argument. He does not grasp the conception of an educational solidarity.

5. There is still more to be said. The public high schools teach two classes of pupils — one class that go immediately from the schools to practical life; one class that go to some higher institution of learning. Here again a division may be made, for some of these students go to one kind of a school and some to another. Accordingly, the public high school is both a finishing school and a fitting school, and, as is well known, the students who are finishing are far more numerous than those who are fitting. What is the bearing of these facts upon the relation existing between the public high school and the university? None whatever, if the best school for finishing is also the best one for fitting; but very great if this is not the case. If the people's college, as it is sometimes called, is not the best university preparatory school, then we have upon our hands a serious problem. Either we must have two kinds of secondary training, and probably in the end two kinds of secondary schools, or one of three things must be done, viz., finishing must yield something to fitting, or fitting must yield something to finishing, or a compromise must be effected between them. While the best school for the one purpose may not be the best school for the other, the two kinds of training nevertheless have so much in common that they can be adjusted to each other and be carried on in the same school, only there must be some concession on both sides. In European countries, where educational conditions are so different from those that exist in our own, this conclusion would have little effect. It is much less important, too, in the eastern states of our Union than in the western states, for a reason that can be presented in statistics.

There have been admitted to Harvard College, in the course of the current academical year, 470 Freshmen. Of these students, 135 were prepared in high schools, 83 in Latin schools, 232 in other schools of a private nature, and 20 by private tutors.

The statistics for the University of Michigan are not quite so definite, but they are practically these: Freshmen admitted, 459; prepared in high schools, 407; prepared in private schools, 52. This exhibit includes both the Literary and Scientific departments.

6. What general conclusions follow from this rapid view of the subject? That the modern educational system is so rigid that it cannot change? Not at all; change is the law of life. Does it follow that the university is bound hand and foot, and unable to stir save by the permission of the secondary schools? Not at all; the improvement in our higher education in late years has been effected mainly by a force that has acted from above, and such will no doubt continue to be the case. The colleges and universities have demanded better preparation and the secondary schools have responded to the call. The secondary schools again have increased their demands upon the elementary schools. There has indeed been an uplifting from below —a "thrust" we may call it—but it has been of a subordinate character, and so it will be.

But, finally, these conclusions follow from the line of reasoning that has been taken:

(1) There is an ideal or a norm of educational organization, based on fact and reason, that is more or less perfectly expressed in our existing primary, secondary, and higher schools of learning.

(2) In seeking the fuller realization of this ideal or norm, and so the improvement of education, the institutions of higher instruction must lead the way. This they must do by raising their standards for admission from time to time, and by improving their own instruction.

(3) In making new demands upon the secondary schools, the higher institutions must pay due heed to the ability of those schools to meet them.

(4) This last admonition is peculiarly important and weighty when addressed to state universities, like those of Michigan, Wisconsin, and Minnesota. These institutions are the highest organs of state systems of public instruction that have been developing through a considerable series of years, and that carry in great part the educational destinies of the people. They cannot forget their origin or deny their relations. The fact is their responsibility is double; for, while they are bound to make all forward movements in concert with the schools below them, they also possess the power, in some measure, of stimulating and quickening the whole educational system of which they are so important a part.

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